The Iraqi Ministry of Health
وزارة الصحة العراقية

SMART – Disease Surveillance Application **Consultant & Monthly Reports**

Delivered for Technical Assignment #3
Prototype Disease Surveillance Application Pilot Deployment
under Subcontract No. 11980
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Abt VOXIVA Smart COMMUNICABLE DISEASE SURVEILLANCE

Contents

ToT Workshop: Elesi Report

ToT Course on SMART System
Amman, Jordan

Consultant: Shpend Elezi

January 29, 2004
Gjilan, Kosovo

Training of trainers (ToT) course on Voxiva software and platform for communicable disease surveillance in pilot sites in Iraq and a review of phone and internet interface for the same software was held in Amman from January 20 till January 24, 2004.
There were 10 participants from Iraqi CDC and pilot sites. Voxiva was represented from George Scharffenberger, Mary Deep, Saad Nasr, Shpend Elezi and George Theodory. The course was organized in an appropriate and sufficient space arrangement in Grand Hayatt, Amman, Jordan.

Course teaching materials- User manual, SMART phone interface slide presentation, SMART cards and planned training exercises materials were more than adequate for the goals and scope of this ToT course. Moreover, the printed materials were of high quality and there was no single objection on preparation of the training materials. Visibility of slide show and sounds were adequate. There were some minor translation imprecision detected which will be addressed as soon as possible. However, preparation of SMART cards and other materials in Arabic language was greatly appreciated.

Participants- We all were impressed by the level of professional knowledge of participants. This impression is reinforced by taking in consideration long isolation of professionals in updating their knowledge and exchange of information and experience. Moreover, their level of English was in satisfactory level. Obviously, they were in the phase where they were more able to understand spoken English than to freely speak and use a broader vocabulary in their expression of ideas and thoughts. However, professional conversation about public health surveillance, different health surveillance methodologies and communicable diseases was indeed in satisfactory level and there was no need for extra translation or language explanations.

Teaching- George Scharffenberger carried out and organized most of the lectures. Shpend Elezi carried out one of the lectures on Wednesday, January 21. George Theodory, Shpend Elezi Mary Deep, and Saad Nasr helped actively George during teaching process and on organizational issues.
The teaching process itself went rather smoothly. At first, comprehension and basic knowledge level of participants was not known. However, quite soon it was clear that comprehension level was rather high which was seen very clear from undertaken

exercises and replies on questions. No doubt, it helped to adjust the teaching process in more appropriate level and overall speeded up the teaching process.
In addition, the motivation of participants was in very high level, which helped also on easy comprehension of some perhaps difficult terms and processes. It was clear that they expressed great interest in knowing and using the new technologies and Internet. As many of them admitted, they were for to long deprived from useful communication with outside world and did not have access to information and updates in many fields including public health. In a way I got the impression they wanted to compensate for the lost time as quickly as possible.
Great motivation for learning, indeed, may have helped to have a great level of discipline during the course. I did not notice any decrease of discipline from the beginning to the end of the course, which helped us to use the time in most efficient way. Also, I thing it helped participant to grasp the information in straightforwardly manner and without unnecessary interruptions or delays.
During the last days of the course, there was a great interest to learn more about the Internet, how to use e-mails, how to retrieve information, what kind of medical recourses can be retrieved, how can be searched for information etc. Obviously, this interest is understandable and we agreed that additional efforts will be invested in training participants on most efficient use of Internet during my visit in Iraq. I will prepare also some additional materials about available medical resources on the Internet.
In addition, analytical skills will be further developed by demonstrating how to analyze data in SMART system and how to present them. These exercises will be conducted during my visits in Iraq.
Some of participants had some minor suggestions on the current arrangements of communicable diseases in SMART. Like, classifying diseases according to the EPI targeted programs, however it was agreed that during the pilot phase SMART will be tested as a tool to enable effortless wide coverage of reporting for communicable diseases and during that phase local stakeholders will eventually decide how exactly their system should look like.

Current public health surveillance system in Iraq- During conversation with participants, I was updated about the current situation in Iraq concerning public health surveillance of communicable diseases. It seems, currently, there is no effective system to collect data on most frequent communicable diseases. After the war, WHO organized a sentinental system of collecting information through focal persons in some regions. This system was clearly not an efficient way for disease surveillance for the entire set of communicable diseases reported in Iraq and it seems also created some problems in communications between WHO, Ministry of Health and CDCC. This system is due to be terminated during the spring of 2004. Very recently, a comprehensive paper based surveillance system was established by Ministry of Health which is in testing phase. Obviously, Voxiva SMART system will consider this comprehensive surveillance system as a referent system in order to adapt and enhance during the course of implementing the pilot phase. However, ultimately the input of local health workers, CDC and Ministry of Health will have decisive role in implementing correctly and adapting SMART system according to the local needs.

Obviously, the current situation regarding communicable disease surveillance is unacceptable due to the lack of flow of information from most of the places in Iraq. Indeed, this fact was repeated many times during the course and in this regard SMART system was viewed as an excellent opportunity to improve current situation by providing health workers with a very useful tool by which it will be more straightforward and uncomplicated to generate data and thus increase the coverage of reported communicable diseases. Thus, SMART was correctly understood as a new tool which potentially may increase motivation of health workers for reporting suspected cases, than, a tool which enables quick feedback on submitted information and ultimately a tool which will help to save lives by enabling fast public health actions as a result of an outbreak reported. However, as a tool SMART can not substitute for other elements of a comprehensive surveillance system in a country including proper development of human and other resources and proper organizational management. I think this aspect was clear and it was expressed by several participants during the course.
Indeed, in different situations and countries a different surveillance system is adequate. Thus, it was recognized by some participants that the information required to be placed in SMART should be kept simple and only most necessary information should be retained which are helpful for analysis of the epidemiologic situation and also would help to undertake effective public health actions as a response to an outbreak.
It seems, we may have to reiterate and explain more often to end users the purpose and importance of gathering most important information and keeping it simple in order to remain high coverage rate of reporting and especially not to gather unnecessary information ("rubbish") that are not directly important for epidemiologic response and to not waste time and resources.

In Conclusion, I think the course went remarkably smoothly without any significant problem. This is due to both, good preparation of teaching materials and good presentation of materials but also of solid intellectual level of participants.
Several remarks and recommendations could be drawn from the experience gained in this course:

- Momentum should be preserved to keep the great enthusiasm and motivation of trainers in order to deliver an efficient training for end users.
- Participants were clearly motivated and excited to learn new technologies in order to compensate for lost time.
- It seems we will not have significant difficulties in passing the knowledge how to use SMART, but instead on technical and communication issues.
- Additional training should be performed for decision-making level in CDC and MoH level on Internet and analytical skills.
- A clear need for further promotion and explanation of SMART platform is needed to all stakeholders in Iraq.
- Current situation on disease surveillance in Iraq is unacceptable, thus a good window of opportunity exist to introduce SMART system as a tool to improve communicable disease surveillance in Iraq.
- Trying to keep SMART an uncomplicated and simple system gathering only most important information may require extra efforts in near future.

Dr. Shpend Elezi, MSc

ToT Workshop: Deeb Report

ToT Course on SMART System
Amman, Jordan
Consultant: Mary Deeb

Training of trainers (ToT) course on Voxiva Software for Communicable Disease Surveillance for the pilot project in El-Khark district and Basra .
Amman, Jordan 19-24 January, 2004
Grand Hyatt Hotel, Amman, Jordan

February 5th , 2004
Beirut, Lebanon

Meeting of trainers 18th and 19th of January, 2004

George Scharffenberger, the Voxiva team coordinator reviewed and discussed the planning and organization of the training course with Mary E. Deeb , Shpend Elezi, Saad Nasr and George Theodory .
The main objective of the two days course planning meeting was fully met, regard reviewing and fine-tuning the course agenda and schedule as well as assigning and distributing tasks and responsibilities among the trainers during the actual trainer .

A reception was organized in the hotel to welcome the Iraqi participants on the evening of the 19th of January. The participants and the Voxiva trainers were introduced to each other in an informal way, which I thought was an excellent ice-breaker that was well appreciated by the group. Some of the participants worked closely with George in Bagdad during his stay in Iraq and where very happy to meet him again. The group dynamics was extremely interactive and relaxed and set the desired non-threatening ground for the pilot training sessions starting the next day .

Training Course 20-24th of January, 2004

The three days of training were characterized by a highly motivated group of public health professionals who were eager to learn and communicate with the outside world . A collegial atmosphere was observed throughout the workshop.

I was impressed by the rigorous discipline of the Iraqi participants :

- They did not complain about the long hours they spent during the training sessions.
- They did not request longer breaks between sessions or to end the sessions earlier in order to have extra free time.

The overwhelming expressed enthusiasm by the Iraqi participants, in promoting and adopting the SMART system as the Surveillance system "par excellence " for the post – conflict Iraq era was reassuring to observe. I think this is due to a large extent to the laborious and excellent preparation of the Pilot SMART system by the Voxiva team and the close collaboration during that stage with the people in Bagdad who are in charge at the ministry of Health and the actual beneficiaries and users of the System .

The training material was extremely well prepared and the software developed by Voxiva is user friendly and an innovative tool for Disease Surveillance. Nevertheless the training material and tools were extremely enhanced by a well-paced presentation that was delivered clearly and interactively during the Tot training course .

The discussion and request for feedback from the participants regard the training schedule by George S. every day, was well perceived and highly appreciated.

The use of English as the training language did not constitute a barrier to the delivery and comprehension of the training the material.

The Females participants were sometimes over shadowed by the males participants during the discussion regard changes in the information on the Smart card such as the list of diseases, who should report etc….They expressed in a confidential manner, their frustration as women to be employed in a male dominated working environment . During the training they refrained from expressing their opinions sometimes because they did not want to argue with their immediate supervisors. I think they appreciated and were happy to have an Arabic speaking female trainer during the ToT course .

In a nutshell the ToT course was well organized, met its set training objectives for the participants. Regard my involvement, I feel it was a rewarding learning experience in terms of my contribution to the training course and the feedback received from the participants.

Mary E. Deeb, Ph.D.
Beirut , Lebanon

Smart ToT: Trainee Assessments

Question/Trainee	1	2	3	4	5	6	7	8	9	10	Avg
Training Objectives											
Overall understanding of Smart	3	3	2	2	3	3	2	3	2	2	2.5
Master telephone interface	1	2	3	3	3	3	3	2	2	2	2.4
Demonstrate training skills in Smart	2	2	3	3	2	3	3	2	2	2	2.4
Learn basic Internet Interface skills	2	2	1	1	2	2	2	1	1	2	1.6
Define implementation/training plan	2	3	2	2	2	2	3	2	2	2	2.2
Subtotal	2	2.4	2.2	2.2	2.4	2.6	2.6	2	1.8	2	2.2
Training Method											
Schedule and Pace	3	3	2	1	3	3	3	2	2	3	2.5
Presentation/training skills	3	3	2	3	3	3	3	3	3	3	2.9
Length	1	2	3	3	3	1	3	2	1	2	2.1
Subtotal	2.3	2.7	2.3	2.3	3.0	2.3	3.0	2.3	2.0	2.7	2.5
Venue											
Training rooms	2	3	3	3	2	3	2	3	3	3	2.7
Hotel rooms	3	3	3	3	3	3	3	2	3	3	2.9
Food/beverages	3	2	3	3	3	2	3	3	3	2	2.7
Subtotal	2.7	2.7	3.0	3.0	2.7	2.7	2.7	2.7	3.0	2.7	2.8
Overall Assessment	3.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0	2.0	3.0	2.7

Not at all satisfied	0
Somewhat satisfied	1
Very satisfied	2
Extremely satisfied	3

COMMENTS

Training Objectives	
Overall understanding of Smart	1. We learned very much about the Smart system and about communications to let the statistics reach much faster than before and get faster action for better health.
Master telephone interface	1. Using telephone (mobile) needs more practice but I thik we learned how to use it and this is an important step for me.
Demonstrate training skills in Smart	1. We got important value about using the telephone and this will make us able to train others
Learn Smart basic Internet Interface skills	1. Yes, of course and this opens us to other parts of the world -- and important step in my life. 2. The time length was too short for learning basic internet skills 7. The time for this should be one more day 8. Need for more time to master the skills
Define implementation/training plan	1. We defined a good plan 2. I think that it will be easy now to deal with the Smart system, step by step 6. I need to go to Basrah to do the plan
Subtotal	
Training Method	
Schedule and Pace	1. It was a very good schedule, excellent and perfect for understanding. 4. There was an extreme disproportion between the amount of material and the time. 8. Needs more time for the Internet
Presentation/training skills	1. Very, extremely satisfied and we hope to train again for other skills 2. All of them were highly qualified and extremely tremendous
Length	1. It needs more time for the program, just to practice to improve our skills 2. I would have liked thie program held in Baghdad and about 2 weeks -- especially regarding internet skills 6. Need more days and to decrease the number of hours per day 7. One more day would be sufficient 8. The programme length needs one more day
Venue	
Training rooms	2. But there were no windows!
Hotel rooms	2. Fastastic

Food/beverages	6. Some foods were unusual for us
Subtotal	
Overall Assessment	
What did you like best?	1. I hope that there are more training programs for other advanced programs in the advanced world, to meet people like those we met in this workshop.
	2. Information about the internet use as well as administration
	4. The organization and the lecturers
	5. Mr. George (the presenter)
	6. To thank you very much
	7. Practicing to use the telephone regarding Smart
	8. The facilitators were of high quality with a friendly manner
	9. Practicing on the telephone
	10. The presenter, Mr.George
Least?	1. I thought that we needed more time for the program
	2. I hope that we will meet all of you in Baghdad
	3. The cold weather
	4. The picnic
	5. Nothing
	6. To increase the number of days to train better on the internet
	7. Nothing
	8. None
	9. Nothing
	10. Nothing
Overall Assessment	1. I am thankful for Mr. George and his colleagues and everyone who shared in this workshop. I wish them success in life and work and we look to them for more help to improve with us our knowledge and the health of all Iraq. I appreciate them and they are our life-long friends.
	7. Except that the internet needs more practice -- I think that one day would be enough for that. I would like to thank all and I hope to see them again in the New Iraq

February Activity Report

To:	Mr. Gerald Evan, Abt Chief of Party
From:	Saad A. Nasr, Project Director Prototype Disease Surveillance Application Pilot Deployment
Subject:	Progress Report for February 2004
Distribution:	Messers. George Landato, Abt Contracting Officer Jeffry Gould, Abt Contract Manager Timothy Irgens, Abt Operations Manager George Scharffenberger, Vice President, Voxiva
Date:	March 5, 2004

Introduction

This monthly progress report covers the month of February. As stated in the progress report of January, the planned activities for February were:

1. Plan the in-country training for the SMART disease surveillance system
2. Mission to Basra to organize training for the Basra Governorate
3. Finalize a solution for connectivity between Basra and Baghdad
4. Follow-up on connectivity issues in Baghdad
5. Complete inventory of project equipment

1. In-country training for the pilot SMART disease surveillance system

   Eight training sessions were planned, six for Basra and two for Baghdad:

   Basra (120 trainees total):

   Sessions 1 and 2: from Feb. 24 to 26 with each session to be attended by 15 trainees for a total of 30 trainees.

   Sessions 3 and 4: From Mar. 6 to Mar. 8 with each session to be attended by 15 trainees for a total of 30 trainees.

   Sessions 5 and 6: From Mar. 13 to Mar. 15 with each session to be attended by 15 trainees for a total of 30 trainees.

   Prior to the start-up of training, a reduction in funding provided to Voxiva under its sub-contract resulted in a cancellation of the pilot in Basra and thus these training programs.

Al Karkh (35 trainees total)

The training calendar for Al Karkh in Baghdad was the subject to three modifications owing to religious holidays. The planned training schedule was as follow:

Sessions 1: from Feb. 25 to 28. (15 trainees).

Sessions 2: from Mar. 6 to 8. (20 trainees).

The first session was successfully completed as planned. The trainees received comprehensive training in 5 modules:

Module 1
- Dialing in
- Authentication
- Main Menu
- Submitting a Null Report
- Exercise

Module 2

Submitting a Vaccine-Preventable Disease report
Submitting Other Reportable Diseases report
Exercise

Module 3

Submitting Multiple reports; same day reports.
- Submitting Alternative Diseases reports
- Submitting reports for previous days
- Exercise

Module 4
- The use of the [☂] key
- The use of the [#] key
- The Voice Mail feature of SMART
- The use if SMART System Assistance (help)

Module 5
- Reporting an Outbreak of a Disease
- Reporting an Unusual Health Event
- Exercise

Training aids, handouts and logistics

Each trainee received one plastic jacket containing a writing note pad, pen, one SMART Health card and one bilingual User Manual. The latter were reproduced locally by Abt. Abt also provided refreshments and light lunches for the training program. Each trainee received $1.00 per day and each trainer received $10.00 per

day for transportation (the three trainers had participated in Amman Trainers Training course).

Abt assistance was also critical in supplying Iraqna mobile phones during the training program since the connection between the telephone system and the Voxiva server at TigrisNet has not yet been resolved.

A training evaluation questionnaire was filled in by each trainee. These will be tabulated along with the questionnaires from the second training session and a summary delivered to Abt and to the SMART Steering Committee tha has been named by the Minister of Health.

2. Mission to Basra

A three day mission to Basra was planed for mid-February but cancelled for security reasons. The main purpose of the mission was to plan the six training sessions in Basra (see above). All project activities related to Basra were cancelled on 21st of February owing to the reduction in available funds for the pilot.

3. Basra Baghdad connectivity

Connectivity between Basra and Baghdad continues to be problematic. Though calls can be made, it can take several hours to get a line and calls are frequently disrupted. Several private contractors were contacted to request quotes for the installation of a VOIP link using a VSAT satellite connection. WHO was also contacted regarding the timing of their expressed plans to install a VSAT for Basra. With the decision to cancel the Basra pilot, these efforts were also suspended

4. Baghdad Connectivity

A part of its workplan, Voxiva was to provide 6 months of Internet connectivity to the following locations for their use of the system's web interface:

a. MoH - Dr.Nima Abd El Sayyed
b. CDCC (MOH/CDCC) - Dr. Mounir Kubbe
c. Karkh Health Directorate – Dr. Ali Abdul Razak
d. Karkh District Clinics Manager – Dr. Hanaa Bahjit
e. Voxiva (Abt)

Designated users at the first four locations will use the connectivity to view, monitor health reports and produce reports and analyze the surveillance data.

TigrisNet has implemented these installations with the exception of the Karkh District (due to be installed in early March). The installation for Voxiva (to be used for system monitoring) was determined by the Abt COP to be redundant due to the fact

that Abt was already supplying internet connectivity for all project staff. At his request, the fifth installation was transferred to the Al-Rusafaa health directorate.

A second connectivity issue, that of connecting the Voxiva servers at the TigrisNet hosting facility with a working telephone switch was the subject of several meetings with the IPTC whose permission is being sought to install gateways and wireless transmitters at a designated switch. Though permission was assured during the earlier Voxiva mission, IPTC requested and was provided with a formal request letter. The response was slower than expected and IPTC has sought assurance that the connection will not be used for other purposes.

A final connectivity issue is that of telephones at the Karkh health clinics. Though most have phones, many of the lines are not working. IPTC was provided with a complete list of the numbers and locations involved and they have expressed their willingness to give the clinics priority for repairs. Abt has also authorized the use of several mobile phones purchased by the project to help assure phone connectivity.

5. Equipment Inventory

A verification and inventory of all equipment received by Voxiva and transferred to TN was undertaken including the verification of tagging. This was done to comply with USAID regulations and to have records for the protection of these assets from unauthorized or unlawful change/exchange of parts, and to permit quick reliable audit, verification and physical control or count if needed.

5. Varia

During Feb., verbal progress report were made to Mr. Jeffry Gould, Abt Contract Manager and Mr. Timothy Irgens, Abt Operations Manager who provided excellent support to all efforts of all of the above activities.

Daily meetings were held with CDC; Dr. Mounir Kubba and Dr. Adnan. Dr. Hanaa Bahjit, Karkh Health District Manager also attended one meeting every week. These meetings were for the planning of training and deployment.

6. Planned activities for March

- The second training session for Baghdad is planned for March 6 to 8.
- All Internet connections will be given final test.
- Final plans for the deployment will be reviewed with CDC.
- Launching the deployment of SMART pilot.
- User support and report monitoring reporting by the health clinics of Al Karkh

March Activity Report

From: Saad Aboul Nasr
Date: April 1, 2004
Subject: **March** activities report

This report covers the activities of the Operations Manager of Voxiva during the month of **March**.

The month of March saw the culmination of all past activities with the deployment of SMART the disease surveillance system in the Al Karkh District of Baghdad.

During this month, two major activities were completed:

Wireless authorization from ITPC

As signaled during the requirements gathering process, neither of the optional hosting facilities for the SMART system was located in areas of Baghdad with working exchanges. It was hoped that this situation would be resolved by the launch of the pilot but unfortunately this has not been the case. In order to connect the health workers in Al Karkh who were making disease reports to the SMART system using telephone, the option of establishing a wireless link between a working telephone exchange and the hosting site was initiated. During March, the long efforts to secure ITPC authorization to install a wireless connection at a designated exchange of ITPC (Sabaa Abkar) and to secure six telephone lines, both indispensable for the planned deployment of SMART, were finally concluded.

1. In the interval between the requirements gathering and the deployment, the CPA Telecoms and the IPTC initiated a policy to restrict the bandwidth proposed for the wireless link. An appeal to the CPA (Fred Matos) and the Frequency Department of ITPC (Dr. Abachi) led to approval of a temporary license approval for use of the required frequencies.
2. The Technical Dept. of ITPC (Dr. Jallo) issued a written approval for the wireless installation and two separate authorizations allowing the installation at Sabaa Abkar Exchange and the approval of the requested six telephone lines.
3. The installation fee per line was increased by the IPTC from $150 to $300 so the number of lines was reduced to six – sufficient since the decision to restrict the pilot to only the Al Karkh district. The Subscription Dept. issued an internal work order with six tel. numbers were assigned.

Daily visits and meetings were held with each department separately to penetrate the cumbersome administrative procedures required to receive all these necessary approvals. Documents and ITPC internal memos were hand carried and delivered to various ITPC sections to expedite the approval processes. In addition, separate follow up meetings were held with Dr. Jallo to obtain approval for repair works to put 21 existing telephones Al Karkh clinics back to service. These existing telephones were planned for the deployment of SMART. By March 28, telephone services were restored to eight of these with the rest scheduled for repairs by April 10, the initial startup date of the deployment.

SMART deployment

1. Planning and preparations. Planning for the deployment of SMART intensified in March. Initially, it had been decided that the deployment would be launched on Sunday, March 14. Meetings were held on two fronts, with CDC (Dr. M. Kubba Munir) on one side and with Dr. Hanaa (District Manager of Al Karkh). There was a wide difference between them as to how to organize the health workers to launch the deployment and to begin submitting daily health reports. Voxiva has always stressed the local ownership concept throughout our work with CDC and the Manager of the District. But there emerged a wide difference between them on how the deployment should proceed. The deployment date was pushed back to Wednesday, March the 24th, as Al Karkh District was targeted for massive vaccination campaign decided by MOH that coincided with the initial start up date.

2. The telephone lines repaired earlier were again put out of service after Al Dora Exchange was hit and damaged. Consequently, ITPC could not commit to repair them again or to repair the rest of the inoperative telephone lines for lack of equipment and spare parts. Initially, we were able to arrange for only seven mobile telephones to use for submitting health reports. Later, this number was increased to 10 after discussions with Abt Chief of Party (Mr. Jerry Evans). The 29 health were workers were organized into 9 groups (clusters) with a designated leader who keeps one mobile phone for the use of the members of his/her group. Proximity was the overriding consideration for the selection of the group members to minimize their displacement for making their daily health reports. Two support staff (supplied by Voxiva as its contribution to the project) were recruited and were given two routes to call on the team leaders and to provide for support and problem resolution if and when needed. The two support user staff were recruited by MPRC local personnel in Baghdad and received training on the SMART system along with the Al Karkh health workers. A control procedure was established to monitor the use of phones to police them against misuse or personal use. The choice of groups and leaders was strictly based on Dr. Hanaa recommendations which were approved by Dr. Kubba (CDC).

3. Though approvals to use wireless spectrum to connect the health workers with the Voxiva servers in Baghdad and telephone numbers were eventually obtained, the link up continued to be plagued by bureaucratic and other challenges. Security

concerns and communication difficulties made meeting difficult to arrange and keep. Management issues within IPTC resulted in the head of the Sabar Abkar exchange to initially refusing to allow the installation of the wireless gateways without additional authorizations. As a result, the decision was taken, in consultation with Abt Chief of Party, Jerry Evans, to begin the pilot using a mirror copy of the SMART software located on Voxiva's servers in Virginia. This hosting service was donated by Voxiva. This "work around" allowed the pilot to begin but required more expensive telephone calls to make the reports. Also, for certain periods, the international connections of the Iraqna mobile service being used were subject to cut-offs and less clear connections, causing some frustration on the part of the reporters.

4. Final preparations and meetings. Three meetings all were held at the meeting room at Al Karkh District Clinic with all the health workers of Al Karkh with Dr. Hanaa assistance:
    - On Thursday, March 19, a preliminary meeting was held to 1) announce the deployment launch date, 2) discuss the designated groups and their leaders and 3) review the procedure of submitting daily health reports that had been covered by the training.
    - On Sun. March 21, a second meeting was held during which 1) ID and PIN numbers were assigned to each health workers and 2) the procedures announced during the meeting of Thursday were reinforced.
    - On Monday March 22, meeting was held to distribute the mobile phones and emergency numbers. Explanations and dry runs for dialing the server number using the mobile phones with emphasis on how to deal with the mobile phones (locking, unlocking, charging the batteries, keying in the telephone PIN if needed, etc.)

5. The deployment of SMART was finally launched on March 24.

Beginning with the first deployment date, daily field visits were made to each group for support, follow up and surveillance of how the deployment was progressing. As security began to deteriorate in Baghdad, daily visits to the group sites were curtailed as per Abt administrative directives. Follow up was done by daily phone contacts and occasional (when needed) meetings with the support staff from MPRC who came to the Sultan Hotel for that purpose.

Throughout the deployment, Abt (Jerry Evans) was kept informed through almost daily briefings of the deployment progress. His support and encouragement were critical to the launch of the pilot deployment – particularly his agreement to provide mobile phones and cover the charges for calls.

April Activity Report

From: Saad Aboul Nasr
Date: April 25, 2006
To: Mr. George Scharffenberger, Voxiva
Dr. George Theodory, MPRC
Subject: April activities report

This report covers the activities of the Operations Manager of Voxiva during the month of April. It is issued from Amman in Jordan after the evacuation of all Abt and Voxiva personnel from Baghdad in compliance with the directives of Abt following the deterioration of the security conditions in Baghdad.

The month of April was a landmark month as it represents the end of the pilot deployment of the SMART disease surveillance system in the Karkh District of Baghdad. During the month, the 29 health workers trained to use the system demonstrated their mastery of and commitment to the system by making regular disease reports. Reports were viewed and responded to by CDC officials.

Beginning with the first of April, security and safety in Baghdad led to curtailing the daily visits to various clinics and hospitals at Al karkh. It also limited the daily meetings with Dr. Mounir Kubba (CDC), Dr. Hanaa Bahjet (DDO Al Karkh) and the health workers participating in the deployment. The daily meetings were to monitor and to review the deployment activities. Instead, oversight was primarily carried out by phone calls. Daily field monitoring and support of the health workers as they made their reports continued to be carried out by the two user support agents contributed by Voxiva through MPRC. As the security conditions worsened, a total curfew was imposed on all Abt and Voxiva personnel. Consequently, we remained at the hotel from April 2 till April 9. Evacuation from Baghdad began on April 10 but because of passport complications, I left Baghdad on the morning of April 13.

Despite the security challenges and added effort required to travel to one of the central reporting sites that had a phone, reporting compliance continued to be high. Reporting continued to be via the Voxiva server in the United States throughout the month. Just as the bureaucratic problems to get the required authorizations to establish a wireless link to the Baghdad servers were being resolved, a bomb fell into the main computer center of the IPTC. Programmers at that center need to switch the assigned numbers to the Saba Akbar exchange but have been forbidden from entering the site until the explosive device can be deactivated and removed by US military bomb disposal experts. Voxiva, TigrisNet and Abt are working together to resolve this issue. Though we have learned never to be too confident that the last hurdle has been reached, it is our understanding that once the computer programmers have switched the numbers to Saba Akbar, the wireless

link can be installed. I continue to receive messages from CDC encouraging as rapid as possible a switch to a Baghdad server.

For the balance of April, most activities were related to monitoring via the Internet of reports being entered into the SMART system and to follow-up by phone with Dr. Mounir Kubba (CDC), Mr. Ahmed Nihad (TigrisNet) and with Mr. Ahmed Najati of Abt who remained in Baghdad for support services. Several meeting were held with Abt Chief of Party, Mr. Jerry Evans. Discussions centered on the assessment methodology for SMART, how to conduct the assessment and who will participate.

Following the arrival of Voxiva Vice President, George Scharffenberger, planning for the assessment intensified. The following elements were decided to be included:

- An audit comparing the software produced with the functional specification document developed under the initial part of the project
- A review of the software's functionality and features by a group of external experts
- A survey of health workers in Al Karkh who have be making telephone reports using SMART
- A group interview with the managers of the Iraqi Ministry of Health's Communicable Disease Control Center responsible for Disease Surveillance and the Director of the Karkh health district

Questionnaires were produced for each of these elements with particular emphasis on the health worker questionnaire. This was finalized with input from Abt staff members based on drafts developed by Voxiva HQ staff with input and translated into Arabic. Arrangements have been made to have the questionnaire administered to the health workers by Abt and the MPRC user support agents at an up-coming health district meeting. I expect to leave Amman on April 28th to return to Beirut.

Scharffenberger Report On Amman Workshop

Iraq Health System Strengthening Project
Voxiva Subcontract
TA#3
Consultant Report

Meeting on Disease Surveillance Systems in Iraq
27-28 March 2004

Consultant: George Scharffenberger

Background: Among the tasks under TA#3 was consultation and coordination with the CPA, CDC, and the WHO and other interested parties concerned with disease surveillance systems in Iraq. Following her return to Baghdad in February 2004, Diane Simpson, formerly an Army Reservist assigned to the CPA and now a representative of the CDC, expressed concern to ensure coordination and synergy among the various efforts to support disease surveillance and response systems within the Iraqi Ministry of Health. In the course of Voxiva's on-going consultations with Ms. Simpson, she requested Voxiva's advice and participation in a meeting to pull together key stakeholders on the issue. Eventually organized jointly with the Iraqi Ministry of Heath, USAID and the WHO, the objective of the workshop was to:

- Review the Ministry of Health surveillance systems specifically related to communicable diseases
- Develop a strategy in order to coordinate the efforts of different partners to meet the vision and goals of the Ministry of Health
- Draft a plan of action for immediate activities during the coming six months

The workshop was held in Amman, Jordan from 27-29 March 2004. Voxiva's participation was discussed with and approved by COP Jerry Evans while Mr. Scharffenberger was on personal travel in Egypt. Given Mr. Scharffenberger's presence in the region, travel costs were minimized. Mr. Scharffenberger attended the first two days of the meeting (27-28 March), making a presentation to the group on 28 March concerning the electronic disease surveillance system developed under sub-contract to Abt.

Activity Report: The meeting agenda and report are attached to this report. Participating were 12 staff from the Iraqi Ministry of Health, including Dr. Nahima Saeed, Director of Public Health and Primary Health Care and Dr. Munir Kuba, the Director of the Surveillance Unit of the Communicable Disease Control Centre; as well

as representatives of WHO, UNICEF, CPA and the US Department of Health and Human Services.

The first day of the meeting revolved around information sharing, starting with a presentation by Dr. Munir on the current situation of surveillance in Iraq and one by Dr. Nagham Mohsen on the Ministry of Health's Health Information System (HIS) (see attached report). Mr. Scharffenberger was next on the agenda, providing a description of the pilot electronic surveillance system and a live, internet-based demonstration to of its use and functionality. Questions/comments revolved around the possible expansion of the system beyond the pilot and to monitor additional diseases (TB, HIV/AIDS, etc.), built-in features to increase data quality and the ability to present the data in additional formats.

Following the Voxiva presentation, WHO provided an historical perspective on its disease surveillance activities in Iraq, including the current sentinel system and email-based electronic reports from several governorates. The CPA shared its plans to support the development of a national computerized system in which its role was defined as providing expertise and funding for the development of software.

With this background, day two was devoted to more participatory analysis of the current situation, including a SWOT analysis facilitate by WHO and the CPA. The results not surprisingly pointed to lengthy lists of weaknesses and threats, the chief of which being the security situation in the country. Nonetheless, the MoH's understanding of the importance of improved surveillance and its commitment do deal with such things as standardization of reports, and the willingness of partners to take advantage of computerization and communications were seen as representing considerable strengths and opportunities.

The Ministry of Health, presented its vision for a communicable disease surveillance system:

A comprehensive, high quality, integrated and sustainable Disease Surveillance System (DSS) that is founded on scientific principles and is financially sound. The DSS should be able to produce accurate, timely and appropriate data and information for decision makers and health providers to respond to public health threats and to meet the present and future health needs of the Iraqi people.

Group discussion rounded out this vision with a list of guiding principles:

- Commitment at every level of the MoH and among partner organizations
- User-oriented in design and comprehensive in implementation
- Partnerships between public and private health sectors
- Investment in human capacity
- Action-biased information
- Flexibility in design and efficient in use of resources
- Ethical and accountable to partners and the Iraqi people

- Continuous evaluation

Agreed-upon strategic directions included:

- Structural reforms
- Development of policies and plans
- Infrastructure development
- Human resource planning and development
- Development of HIS
- Governance policy established for both public and private sectors

The key components in each of the following areas:

- Policy and Regulation (including revised reporting and quality assurance standards)
- Human resources (including the need for training, motivation and accountability)
- Management and Operations (including the advisability of a phased-in, step-by-step approach and the rational use of computers)
- Logistics (including attention to the development of communication systems)

A third day (not attended by the consultant) was directed at the development of an action plan for activities to be implemented over the next four months (see report).

Conclusion/Analysis: The Amman meeting provided a useful, necessary and overdue opportunity for discussions on the critical issue of disease surveillance in Iraq. Over the past year, and particularly since the departure of the WHO core team from Baghdad, communication on the subject between the principal actors, the MoH, the CPA, USAID and the WHO, has been at best sporadic and at times characterized by misunderstandings and posturing rather than collaboration. While each has spoken to Voxiva of the need for and their own institutional commitment to collaboration and coordination, conversations with the MoH, the CPA and WHO indicated the lack of a common vision and of agreement on roles.. The absence of a consistent platform for information sharing, coordination and, ideally, for joint planning has been an obstacle to overcoming this situation.

The importance of the Amman meeting, of the discussions and the commitments made cannot, therefore, be overstated. Though still at a fairly general level, agreement on vision, strategies and on concrete follow-up actions was commendable and the positive personal dynamics between the participants seemed genuine. Technical interventions on the part of CDC's Robert Fagan, who brought considerable experience in the design of surveillance systems, and the management experience and facilitation skills of MPRC's George Theodory were particularly helpful. The ultimate impact will depend on the ability to follow-through on those commitments and to maintain the atmosphere of collaboration under Iraqi leadership that developed during the meeting. One area in which additional thought and a common approach may be required given the experience of the Voxiva pilot, is that of connectivity strategies. Post-war repair and development of

telephony and internet connectivity have been slower than expected. While the pace of telecommunication infrastructure improvement is expected to pick up, this needs to be monitored and a flexible system design developed to respond to the pace and opportunities presented by the direction that the infrastructure and services ultimately take.

Given the inclusion of disease surveillance as one of the activities for the follow-on project to be financed by USAID, their lack of participation was regrettable. Hopefully that will be remedied in their more active involvement in follow-on activities.

Disease Surveillance System in Iraq

A partnership led by
The Iraqi Ministry of Health
in co-operation with
The Coalition Provisional Authority
The World Health Organisation
&
USAID

27-29 March 2004

Amman/Jordan, Al-Fanar Hotel

Draft Report

Disease Surveillance in Iraq

Al-Fanar Hotel, Amman, 27-29 March 2004

Background

Representatives from the Iraqi Ministry of Health (MoH), the Coalition Provisional Authority (CPA) and the World Health Organisation (WHO) met in Amman, Jordan from 27th to 29th March 2004 to discuss the disease surveillance programme in Iraq. The purpose of the meeting was to review current surveillance activities, understand the Ministry's plans for disease surveillance, and to derive a strategy that co-ordinates the efforts of different agencies to meet the goals of the Ministry. The meeting was attended by 24 participants who included representatives from MoH (12), CPA (3), WHO (5), UNICEF (1) Voxiva (2), USHSS (1). In addition representatives of NGOs attended part of the third day.

The expected outcome

To develop an integrated and comprehensive programme for communicable diseases surveillance in Iraq.

The main objectives of the meeting were

- Review the Ministry of Health surveillance systems specifically related to communicable diseases
- Develop a strategy in order to co-ordinate the efforts of different partners to meet the vision and goals of the Ministry of Health.
- Draft a plan of action for immediate activities during the coming six months.

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Day 1: (27th March 2004)

1) ***Introduction and welcome by Dr. Munir Kubba the Director of the Surveillance Unit of CDC/ MoH Iraq and Dr. Naeema AlGasseer; WHO Representative for Iraq. Greeting was also brought by CPA advisor; Dianne Simpson.***
   Dr. Al Gasseer facilitated the workshop.

Main points:

- Surveillance is a corner stone for combating public health threats.
- The Iraq MoH is now able to rebuild and modify the system.
- Co-ordination and collaboration between all partners is crucial to allow experience to be exchanged and to avoid duplication or gaps.

Presentations and main points

1). Current surveillance status (MoH):

- A comprehensive surveillance system is functioning in Iraq
- Data are reported from the health facilities to the district, then to the governorates and then to the central level.
- Immediate, weekly and monthly reports need to be enhanced.
- The main obstacles to effective surveillance are:
    - Inadequate laboratory services
    - Poor communication system
- Further training is urgently needed
- Inter-sectoral coordination needs to be enhanced
    - The MOH/CDC is developing plans for both short and long-term improvements to the system with advice from CPA and WHO.

2). HIS in Iraq (MoH):

- The HIS functions well, covering all health facilities. It needs to be computerized.
- Data on morbidity, mortality and other vital health statistics are collected monthly.
- Data on human resources are collected quarterly.
- The same reporting procedures for morbidity data are used by both the surveillance and the HIS departments.
- Supervision and feedback are regular – needed to inform policy making.

Main points discussed

- Needs for lab-based surveillance
- All health facilities are supposed to report but PHC units without doctors are not reporting
- Need to evaluate previous training activities and plan for future training.
- Need to integrate surveillance of special programmes into the system.
- Urgent need for standard case definitions

3). SMART project (VOXIVA):

- Telephone data reporting system for immediately reportable diseases.
- Currently being piloted in the Alkarkh district of Baghdad.
- Robust system: weekly and monthly reporting can be added
- Easy access to data at all levels

4). WHO activities to support disease surveillance in Iraq (WHO)

MoH/ WHO workplan*:*

- Supporting the development of a surveillance and outbreak response system – improving communication.
- Supporting the monitoring of immunization activities
- Supporting the rehabilitation and upgrading of key PHLs at regional and national levels
- Supporting TB diagnosis and control.
- Supporting surveillance and control of parasitic diseases.

***WHO roles and functions*:**

- The role of WHO is mainly technical, supporting governments at their request

5). Computerized surveillance (CPA):

- Having a computerized system will allow fast communication, quality data, rapid and effective data analysis
- The challenges: having the equipment, connectivity and the trained staff
- CPA's role: Locating expertise, developing software and funding

Day 2: 28th March 2004

The group undertook a situation analysis of the current system of CD Surveillance

Strengths	Weaknesses
• Commitment of the MoH for the development of the surveillance system • Readiness to learn and accept changes • Readiness to have a standardized approach that is flexible • Readiness to set up alternatives • Availability of motivated and experience staff • A large percentage of health facilities are directed by physicians • Standardized forms are available • Laboratory network • Capability of the system to prioritize the programs according to disease situation • Monthly news letter supported for printing by WHO	• Poor communication system and IT gaps • Existence of some vertical systems of surveillance with poor integration • System unable to respond to rapid events • Shortage of well trained staff and the rapid turn over of trained health care providers • Poor co-ordination between building capacity of personnel and of the system • Poor training – in medical and technical schools; in-service etc. • Insufficient supervision mechanisms and support (transportation) • Lack of clear understanding among various groups about the importance of integrated disease surveillance (e.g. clinicians, NGOs) • Perceived lack of collaboration between the different levels especially the governorates and central authority (e.g.- North) • Lack of co-ordinated reporting between different sectors • Lab network not functioning properly and poor

	co-ordination between labs and clinical centres • Need for updated procedures and regulations for reporting • Poor data dissemination • Problems with existing data sets (lack of reliable geographic/ demographic data; lack of base line data; risk that former data are contaminated • Lack of common data standards • Insufficient continuity of on-going data collection, analysis and dissemination of the information linked to decision making • Lack of linkage between the software and the actual architect data • Data not used properly at local level for monitoring and decision making • Inadequate financial resources • Private sector lacks understanding of surveillance and a mechanism for implementing the surveillance system
Opportunities	**Threats**
• Political commitment to develop the system • Support from all decision makers at all levels • Opportunity to have a computerized system • Rehabilitation of labs • Possibility to develop better links between labs and the rest of the surveillance system • Fully transparent environment • Co-ordination between partners • Opportunity to learn from other country's experiences • Engagement of the community • Different partners in Iraq are interested in investing in the country	• Poor security in different parts of Iraq • Delays in timely development of the national telecommunication system • Change of political structure might not be clearly articulated with a clear understanding of need for a comprehensive system • Donors might push for different systems - competing priorities in Iraq • Inadequate improvement of the infrastructure • Sustainability of funding • Poor maintenance of equipment

MoH vision and basis for strategic elements to build the CD surveillance system

Vision:

A comprehensive, high quality, integrated and sustainable Disease Surveillance System (DSS) that is founded on scientific principles and is financially sound. The DSS should be able to produce accurate, timely and appropriate data and information for decision makers and health providers to respond to public health threats and to meet the present and future health needs of the Iraqi people.

Guiding Principles:

The Communicable Disease Surveillance System (CDSS) will:

- Be based on commitment from all levels of the MoH and its partners
- Be user oriented in design and comprehensive in implementation
- Build partnerships with the public and private health sectors
- Invest in human capacity throughout the MoH

- Provide surveillance data useful to planners and decision makers
- Be flexible in design and efficient in its use of resources
- Be ethical and accountable to all partners and the Iraqi people
- Evaluate continuously its development, implementation and results

Strategic Directions
- Reformed structure
- Health policy and plans developed
- Capacity building of infrastructure
- Human resources planning and development
- Health Information & Management System developed
- Governance policy and mechanism is established for both private and public sector

A. Policies and Regulations
- Develop regulations on disease notification
- Establish data standards
- Policy regarding data analyses for all levels
- Policy on data dissemination
- Quality assurance standards
- Roles and Responsibilities

B. Human Resources
- Training: initial and updating; also liaison with medical and technical schools to provide needed skills
- Hire persons suitable for the job
- Evaluation of staff performance
- Motivation: establish career development and career plans
- Assessment of personnel needs
- Capacity building
- Development

C. Management and Operations:
Initial System
- Start with Communicable Diseases
- Integration of existing Communicable Disease data sets
- Work with and improve vital statistics
- Phased-in approach
- Rational (planned) use of computerization
- Obtain input for major decisions from other levels of MoH, Health professionals and the public
- Community Development

D. Logistics: Communications
1) Implement improved communications as they become available
  - Assess current status

- Use other systems, if available,
- Evaluate use of VSAT
- Consider importance of reporting of public health when developing protocols

2) Raise the priority of public health data as an issue

Day 3: 29th March 2004

Presentation of the draft Integrated Approach to Communicable Disease Surveillance System in Iraq. (See Annex 5).

Decision on activities to be implemented immediately by partners to support the MoH during the coming four months

- Rapid assessment of laboratory capacities in conducting new tests that concur with case definitions supported by WHO
- Identify internal and external experts who can advise on all aspects of CDS- WHO / CDC Atlanta
- Established a Technical Committee (TC) of MoHE (experts) and MoH.
- Experts (internal and external) to review the list of reportable conditions that has been developed.
- Conduct a series of televideo conferences between the CDS team and external experts to review the list of reportable diseases and case definitions.
- Circulate the drafts to experts regionally and internationally for feedback.
- Working session with CDS Team and TC
- Draft the TOR and methodology of work of the TC (Dr. Osama)
- CDS Team to work on the case definitions (both syndromic and on laboratory results-based)
- Establish the case definitions for the agreed list of conditions
- Circulate the list to all the various programmes for review and building consensus
- CDS Baghdad has internet connectivity
- Regular Monthly Feedback / News letter (CDS)
- "Star Trio" broadband internet systems. At present working in Baghdad and shortly to start in Mosul, Basra and Erbil providing internet connectivity. Systems should be provided for two other governorates, Najaf and Nasiryya, as soon as possible
- Recruit a Task Force of experts to review the status of the Iraqi Disease Surveillance System.

Training of the staff:

- Training of staff on data collection and the use of computers and the internet
- Training of Trainers of CDS managers
- Trainers from CDS to train health facility staff
- Focal points appointed at facility level for data collection

- Provision of supervision – need for transport

Next Steps:

- Small Team from MOH, CPA and WHO will work on the initial draft prepared by the workshop on 29th & 30th March 2004.
- WHO to circulate the work from this meeting by 10 April 2004 to all participants
- Translate diseases names into relevant languages (Arabic, English and Kurdish) (Dr. Munir & Dr. Mohammad)
- Draft TOR for Technical Committee by 10 April 2004 (Dr. Osama and Dr. Munir).
- Immediate written description of role of Technical Committee (Dr. George.Theodory)
- Immediate draft of a comprehensive document about the full situation of the Iraqi disease surveillance system by MOH/WHO/CPA. WHO will co-ordinate all involved including NGOs to produce the document by the end of May 2004 (Dr. Tim Healing & Dr. Buthaina Ghanem).
- Draft strategy to be completed and circulated by 20th April 2004 by CDC to all governorates – WHO/NGO/CPA/All partners – MOH to lead – Dr. Neimah
- Voxiva – pilot project started – assessment by end of April 2004 – linked to the strategy – to fit the scheme of the strategy based on the assessment.
  At pilot level and governorate level
  Dr. George Sharffenberger & Dr George Theodory
- In-service training – on the job training, governorate by governorate
- Training for Surveillance Units on implementing the new forms.
- Establish a Task Force to review the list of diseases
- TOT – internet, statistics, data collection and management
- Supervision can be initiated.

Conclusions & Recommendations

- Surveillance is a corner stone for combating public health threats
- Iraq MOH is now able to rebuild the system
- Accurate laboratory -based surveillance is the main aim
- Specific disease control programs (with their own data collection) to become involved in the general disease surveillance programme
- Coordination and collaboration between all partners is crucial to avoid duplications or gaps
- Conduct a review and baseline analysis of the CDSS to gain a good understanding of the current situation
- Assure that the improved CDSS is consistent with the MoH's new organizational structure. Integrate any CDSS policies and plans within the overall MoH health plan

- Review and revise as needed CDSS policies and standards to meet international policies and standards. Ensure that mechanisms are in place to implement CDSS policies and standards
- Review current health legislation and regulations and ensure that clear guidelines for implementation are in place.
- Evaluate the plan at all levels of the MoH as it is developed and implemented
- Update the MoH Health Information Section so that demographic data that are important for correct analysis of CDSS data are available
- Communicate information from the CDSS and the actions that were taken based on the analysis of the information on both regular and *ad hoc* bases to decision makers, health care providers and the public. These communications will follow the policies and standards established for release of information.

Annexes

Annex 1: Workshop agenda

Disease Surveillance Programme in Iraq

Partnership led by MOH in cooperation with CPA, WHO & USAID

27th to 29th March 2004

Programme of Workshop

Day One: 27 March 2004

13:30	Welcome Introduction & expected outcome
14:00	Current Status of surveillance Programme in Iraq - MOH
15:00	Discussion
15:30	Coffee Break
16:00	USAID /Abt –Voxiva
16:30	World Health Organization
17:00	CPA – computerized Surveillance
17:30	Wrap up

Day Two: 28 March 2004

9:00	Reflection of the previous day
9:30	Situation Analysis of the current system of CD Surveillance (strengths, weaknesses, opportunities and threats)
11:00	Break
11:30	MoH vision and base for strategic elements to build the CD surveillance system
12:30	Lunch
13:30	Strategies (policy & standard development, human resources, development needs including education and training
15:30	Management and logistics system including quality control.
16:30	Wrap up

Day Three: 29 March 2004

8:30	Synopsis of the previous day
9:00	Presentation of draft Integrated Approach to Communicable Disease surveillance system in Iraq
9:30	Discussion
10:00	Decision on the Immediate activities to be implemented by partners to support the MoH during the four months

11:00 Coffee Break
11:30 Next Step
12: 30 Closure

Annex 2: List of Participants

Ministry of Health

Dr. Naimah Saeed	Director of Public Health & PHC department /MoH	Prev11@yahoo.com
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UNICEF

Dr. Alex Malayvin	

USHSS

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Annex 3: List of documents circulated to the participants

1) Comprehensive communicable diseases surveillance forms for Iraq:
   a. Weekly reporting form.
   b. Monthly reporting form (According to districts).
   c. Communicable diseases notification form.
   d. Mortality due to communicable diseases form.
   e. Monthly reporting form (According to age and sex).
   f. A page of the communicable diseases registration book.
   g. A page of the preventive measures registration book.

2) Latest Public Health Problem Identification and Verification List.

3) Weekly report on health and factors affecting health (Form).

4) An integrated approach to communicable disease surveillance; Weekly epidemiological record (7th January 2000).

5) WHO-recommended standards for surveillance of selected vaccine-preventable diseases (WHO, February 2003).

6) Updated guidelines for evaluating public health surveillance systems (27th July, 2001).

7) Health information systems development and strengthening (WHO, January 2000).

8) Guidelines for use of health surveillance forms (March 2003).

9) Case definitions for Iraq (March 2003).

10) Communicable Disease Profile for Iraq (Updated on 19th March 2003).

Annex 4. Draft 2 of the Integrated Disease Surveillance Plan

(NB. This plan was developed following the workshop by a group comprising key workshop participants and is based on the workshop outcomes).

Strategic Plan for Communicable Disease Surveillance
Iraq
2004-2005

Introduction:

Communicable Disease surveillance in Iraq was and is based on summary monthly data collected by PHCCs and Hospitals and sent manually to the district and DOH surveillance units. These reports were aggregated at the district and governorate levels and the results sent to the CDC surveillance section. Some programs, such as TB control and HIV/STI control, collected data separately. The system was slow, rapid trends were sometimes missed, and the data were not useful to make public health decisions.

The system now uses immediate, weekly, and monthly reporting forms, that are more comprehensive than the older forms. With these reports the staff should be able to analyze the data and react more rapidly to events, especially as electronic reporting becomes increasingly available.

Purpose:

The purpose of this document is to provide a plan for the coordinated development and implementation of an improved, integrated, comprehensive communicable disease surveillance system. The framework lists the necessary steps and establishes a guide to monitor progress.

Conclusion:

The plan presents an incremental and developmental approach to achieve an integrated Communicable Disease Surveillance System (CDSS) in Iraq. Development of the plan is a means to facilitate the cooperation of all the partners to work effectively and successfully together toward the common goal of timely, complete and accurate disease surveillance within the Iraqi Ministry of Health. It is imperative that this plan be comprehensive and has a means to track implementation. It is understood that the dissemination of this plan to all partners for their ownership is important to successful implementation.

Vision:

Comprehensive, high quality, integrated, and sustainable Disease Surveillance System (DSS) that is founded on scientific principles and is financially sound. The DSS is able to produce accurate, timely and appropriate data and information for decision makers and health providers to respond to public health threats and to meet the present and future health needs of the Iraqi people.

The CDSS will:

- Be based on commitment from all levels of the MOH and its partners
- Be user-oriented in design and comprehensive in implementation
- Build partnerships with the public and private health sectors and the public
- Invest in human capacity throughout MOH
- Provide surveillance data useful to planners and decision makers
- Be flexible in design and efficient in its use of resources
- Be ethical and accountable to all partners and the Iraqi people
- Evaluate continuously its development, implementation and results

Strategic Directions

- Capacity building of infrastructure including increased use of computer technology
- Planning and development of Human Resources
- Decentralization and delegation of responsibility to governorates and districts
- Comprehensive and available health data

Expected Results 2004-2005

- MOH structure reformed
- Health policy and plans developed
- Health information and management systems developed
- Governance policy and mechanisms are established for public and private health sectors

Recommendations:

1 Conduct a review and baseline analysis of the CDSS to gain a good understanding of the current situation

2. Assure that the improved CDSS is consistent with the MOHs new organizational structure. Integrate within the overall MOH health plan any CDSS policies and plans

3. Review and revise as needed CDSS policies and standards to meet international policies and standards. Ensure that mechanisms are in place to implement CDSS policies and standards

4. Review current health legislation and regulations and ensure that clear guidelines for implementation are in place.

5. Evaluate the plan at all levels of the MOH as it is developed and implemented

6. Update the MOH Health Information Section so that demographic data that are important for correct analysis of CDSS data are available

7. Communicate on regular and ad hoc bases to decision makers, health care providers and the public information from the CDSS and the actions that were taken based on the analysis of the information. These communications will follow the policies and standards established for release of information.

Strengths, Weaknesses, Opportunities and Threats Analysis

Strengths

- Commitment of the MoH for the development of the surveillance system
- Readiness to learn and accept changes
- Readiness to have a standardized approach that is flexible

- Readiness to set up alternatives
- Availability of motivated and experience staff
- A large percentage of health facilities are directed by physicians
- Standardized forms are available
- Laboratory network
- Capability of the system to prioritize the programs according to disease situation
- Monthly news letter supported for printing by WHO

Weaknesses

- Poor communication system and IT gaps
- Existence of some vertical systems of surveillance with poor integration
- System unable to respond to rapid events
- Shortage of well trained staff and the rapid turn over of trained health care providers
- Poor co-ordination between building capacity of personnel and of the system
- Poor training – in medical and technical schools; in-service etc.
- Insufficient supervision mechanisms and support (transportation)
- Lack of clear understanding among various groups about the importance of integrated disease surveillance (e.g. clinicians, NGOs)
- Perceived lack of collaboration between the different levels especially the governorates and central authority (e.g.- North)
- Lack of co-ordinated reporting between different sectors
- Lab network not functioning properly and poor co-ordination between labs and clinical centres
- Need for updated procedures and regulations for reporting
- Poor data dissemination
- Problems with existing data sets (lack of reliable geographic/ demographic data; lack of base line data; risk that former data are contaminated
- Lack of common data standards
- Insufficient continuity of on-going data collection, analysis and dissemination of the information linked to decision making
- Lack of linkage between the software and the actual architect data
- Data not used properly at local level for monitoring and decision making
- Inadequate financial resources
- Private sector lacks understanding of surveillance and a mechanism for implementing the surveillance system

Opportunities

- Political commitment to develop the system
- Support from all decision makers at all levels
- Opportunity to have a computerized system
- Rehabilitation of labs

- Possibility to develop better links between labs and the rest of the surveillance system
- Fully transparent environment
- Co-ordination between partners
- Opportunity to learn from other country's experiences
- Engagement of the community
- Different partners in Iraq are interested in investing in the country

Threats

- Poor security in different parts of Iraq
- Delays in timely development of the national telecommunication system
- Change of political structure might not be clearly articulated with a clear understanding of need for a comprehensive system
- Donors might push for different systems - competing priorities in Iraq
- Inadequate improvement of the infrastructure
- Sustainability of funding
- Poor maintenance of equipment

Strategic Plan for Development

Introduction

The development of an enhanced system for reporting communicable diseases of public health importance in Iraq requires a comprehensive and strategic approach that addresses and promotes necessary changes in several key systems.

These systems are:

1. Policies and Regulations
2. Health Information
3. Human Resources
4. Operational Logistics: Transportation and Communication

These areas must each develop and incorporate modifications in their procedures that enhance the development of the new communicable disease surveillance system (CDSS). These changes should occur in time to promote progress in other areas. Without this overall synergistic plan of action, the development of a new CDSS will be unnecessarily slow and sporadic.

Such comprehensive plans are not easy to achieve and close coordination, cooperation, communication and compromise will be required from all areas and all levels within the Ministry of Health and from all partners throughout Iraq and the region. This plan of action is meant to promote partnerships and achieve success.

Action Plan

For each of the four systems, the plan provides objectives, products, actions to achieve the products and an estimated time of completion for each action. In addition, the group responsible for the different actions is designated. This strategic approach will be monitored and modified as needed to achieve the intended goal of new communicable disease surveillance system.

Communicable Disease Surveillance System
Strategic Plan for Development

I. Regulations and Policies

Objective	Product	Actions	Timeline Start - End	Lead*	√	Comments
Establish Regulatory environment that assists CDSS	Reporting Regulations: Who When What	. **New Regulations** 1. Development of Reporting regulations a. Form representative work group b. Write draft regulations c. Seek input on draft from all levels and partners d. Revise as necessary 2. Obtain MOH approval of regulations a. Present to Directorate Public and Primary Health b. Directorate presents to Minister 3. Present to partners and seek support 4. Present Regulations to legislative body 5. Implement regulations a. Communicate to all relevant groups b. Train staff c. Monitor results				
Establish MOH policies that promote effective surveillance	A. Clinic and hospital CD reporting policies	**Public and Primary Health Policies** A.1. Develop reporting policies A.1.a. Form representative work group A.1.b. Draft new policies A.1.c. Seek input from all levels and partners A.1.d. Revise as necessary A.2. Propose through MOH system A.2.a. Present to Directorate Public- Primary Health A.2.b. Consult other relevant Directorates A.3. Communicate policies to clinics and hospitals A.4. Train staff A.5. Implement and monitor			√	

Objective	Product	Actions	Timeline Start - End	Lead	Comments
	B. CDSS internal policies	**CDSS Policies** B.1 Develop CDSS policies B.1.a Form representative workgroup B.1.b. Draft policies B.1.c. Seek input throughout Directorate B.1.d. Revise as needed B.2 Propose to directorate and governorates B.3 Communicate policies to staff B.4 Train staff			
	C.Policies in other areas	**Other MOH Policies** B.5 Implement and monitor C.1 Determine other needed policies C.1.a. Survey other directorates C.1.b. Recommend need to other directorates C.2 Develop policies in other directorates C.2.a Form representative workgroup C.2.b Draft policies, seek input, C.2.c Revise as necessary C.3 Propose through MOH system C.4 Communicate policies C.5 Train staff C.6 Implement and monitor			
Partners policies and efforts assist MOH CDSS	Partners' efforts and policies on disease reporting	1. Partners seek input on current procedures and their effect on reporting 1.a Distribution of hardware 1.b Distribution of software 1.c Separate reporting systems 2. Partners re-enforce and/or revise policies to promote rapid, complete reporting to MOH 3. Monitor affects of policies and procedures on reports			
Quality Assurance	QA methods and	1.Expertise sought to advise CDS leadership on means to provide QA within CDSS			

(QA)	standards established	2. Staff trained on QA 3. QA steps developed and implemented 4. QA monitored and evaluated

II. Health Information Systems

Objective	Product	Actions	Timeline Start - End	Lead*	√	Comments
Communicable Disease Reporting system that is complete, accurate and rapid	A.Electronic Disease Reporting Software	A: **Develop software for electronic system** A.1. Develop committee of MOH staff, outside experts and users of data A.2. Develop list of reportable diseases A.3. Establish case definitions for each reportable disease: suspect, probable and confirmed A.4. Determine reportable elements for each disease and at each level of reporting A.5 Establish coding standards A.6. Develop prototype user interface system A.7. Beta test – revise as needed A.8 Pilot system A.9 Continue development A.10 Train staff and begin implementation A.11 Establish quality assurance procedures A.12 Monitor program's progress				
	B. Disease Reporting Hardware	B. **Planned Distribution of hardware** B.1 Develop standards for hardware B.2 Survey current status of hardware in MOH B.3. Form representative workgroup and develop plan for acquisition and distribution of hardware				
	C. Complementary Systems	C**. Determine uses and incorporation of other means of reporting** (e.g. telephone, fax)				

Objective	Product	Actions	Timeline	Lead	√	Comments

		Start - End
Vital Record system that is complete and accurate	Vital Record Systems	1. Vital Records Unit surveys current vital statistics reporters to determine completeness and accuracy 2. Form workgroup to determine means to improve reporting 3. Develop strategic plan to improve vital records 4. Achieve approval and buy-in of plan 5. Implement plan 6.Monitor progress 7. Develop links with CDSS
Laboratory data incorporated into reporting system	Method for laboratory to report and provide data to CDSS	1. CPHL forms workgroup with governorate and hospital laboratory directors 2. Workgroup determines capabilities, role and means of reporting data needed for surveillance and makes recommendations 3. Workgroup interacts with CDSS to incorporate recommendations into system

III Human Resources

Objective	Product	Actions	Timeline Start - End	Lead*	√	Comments
Staff able to meet vision for CDSS	MOH policies that promote competent staff	1. Determine number and capabilities of staff needed for CDSS 2. Draft job descriptions for CDSS staff and place staff based on requirements 3. Evaluate staff on regular basis and develop merit system				
	Staff training and career development programs	1. Determine training needs (Information technology, surveillance, statistics, epidemiology) 2. Seek means to meet training needs 2.a Courses available in Baghdad 2.b Courses in region 2.c Bring outside courses to Baghdad 2.d Internet and other electronic training 3. Establish training and make available to all levels 4. With staff input, institute career development				
	Recruitment policies that obtain needed expertise	1.Determine which staff are difficult recruit 2. Evaluate Ministries or Companies that are successful in recruitment 3. Make recommendations to improve recruitment				
	University curriculum that provide trained staff to meet MOH needs	1. Determine staffing needs not currently met by recent graduates 2. Work with Universities to develop needed skills				

IV. Logistics: Communication and Transportation

Objective	Product	Actions	Timeline Start - End	Lead*	√	Comments
Rapid communication between all levels and with other sectors Regular, frequent transportation between levels	A.Telephone Communication B. Internet Communication	A. Investigate new services B. Investigate new technology and systems				